

(12) United States Patent Dubois

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(54)	MARINE COUNTERMEASURES LAUNCH ASSEMBLY		
(75)	Inventor:	Neil J. Dubois, Cranston, RI (US)	
(73)	Assignee:	The United States of America as represented by the Secretary of the Navy, Washington, DC (US)	
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(56)	References Cited		

6,336,641 B1 '	1/2002	Williams	277/637
2002/0073831 A1	6/2002	MacLeon	70/133

FOREIGN PATENT DOCUMENTS

123598 * 3/1919 114/22 GB

* cited by examiner

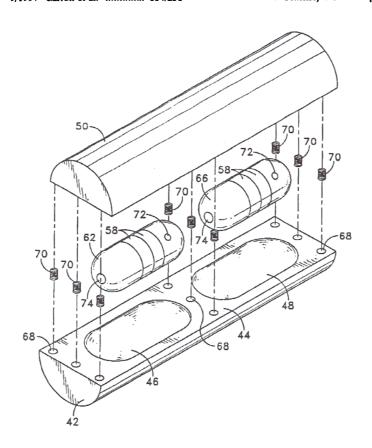
Primary Examiner-Michael J. Carone Assistant Examiner-Gabriel S. Sukman

(74) Attorney, Agent, or Firm-Michael J. McGowan; Michael F. Oglo; James M. Kasischke

ABSTRACT

A marine countermeasures launch assembly includes a cylindrical body including first and second members having, respectively, first and second surfaces engageable with each other to form the body, the first surface having first and second recesses therein, the second surface having first and second recesses therein opposed to the recesses of the first member when the members are engaged, to form a first chamber for retaining a first countermeasure and a second chamber for retaining a second countermeasure. The first and second surfaces have opposed bores therein. A spring is disposed in each pair of the opposed bores and urges the members to separate from each other to release the countermeasures after the assembly is launched.

7 Claims, 4 Drawing Sheets



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U.S. PATENT DOCUMENTS

2,779,282 A • 1/1957 Raffel 102/374